STATEMENT OF WORK

APPENDIX D TO THE CONSENT DECREE FOR THE WALLACE YARD and SPUR LINES SITE

_____2009

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Wallace Yard & Spur Lines Site SOW

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STATEMENT OF WORK WALLACE YARD and SPUR LINES RESPONSE ACTION

INTRODUCTION, DEFINITIONS, AND GENERAL PROVISIONS 1.0

1.1 Introduction

This Statement of Work ("SOW") details, as Elements of Work, the tasks and activities to be undertaken by Union Pacific Railroad Company and BNSF Railway Company (collectively, "Settling Defendants") at the Wallace Yard and Spur Lines Site (the "Site") in compliance with the Consent Decree ("CD"). The geographic scope of the Site is generally depicted in Figures 1-1 and 1-2 of the EE/CA, copies of which are included in Attachment A to this SOW. The Elements of Work and their respective Components are as follows:

1.1.1	Wallace	Yard E	Element	of	Work
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1	1 1	1	Removal	s and	Dienosa	l Com	onent	of Wor	·k

- 1.1.1.2 Other Removals and Disposal Component of Work
- 1.1.1.3 Gravel and Vegetated Barriers Component of Work
- 1.1.1.4 Hydroseed Component of Work

1.1.2 Hercules Mill <u>Site</u> Element of Work

- 1.1.2.1 Removals and Disposal Component of Work
- 1.1.2.2 Other Removals and Disposal Component of Work
- 1.1.2.3 Gravel and Vegetated Barriers Component of Work
- 1.1.2.4 Hydroseed Component of Work
- 1.1.2.5 Access Controls Component of Work

1.1.3 Nine Mile Element of Work

- 1.1.3.1 Removals and Disposal Component of Work
- 1.1.3.2 Other Removals and Disposal Component of Work
- 1.1.3.3 Gravel and Vegetated Barriers Component of Work
- 1.1.3.4 Asphalt Barriers Component of Work

1.1.4 Canyon Creek Element of Work

- 1.1.4.1 Removals and Disposal Component of Work
- 1.1.4.2 Other Removals and Disposal Component of Work
- 1.1.4.3 Gravel and Vegetated Barriers Component of Work
- 1.1.4.4 Asphalt Barriers Component of Work

1.2 **Definitions**

Unless otherwise expressly provided herein, terms used in this SOW which are defined in Section IV of the CD shall have the meaning assigned to them in the CD. For convenience, definitions of certain terms defined in the CD, as well as certain other terms that are used in this SOW, are provided, below.

- "Ballast" shall mean the rock material originally used by Settling Defendants for track and tie embedment within the Site. Within the Site, ballast consists of Mine Waste, material contaminated with Mine Waste, or clean quarried rock. Due to scatter, previous maintenance activities and flood events, the present ballast location may not be limited to the rail section, but may include the adjacent shoulders and other areas within the Site.
- "Basin ICP" shall mean the institutional controls program for the Coeur d'Alene Basin Environment administered by the Panhandle Health Department. The Basin ICP includes: (a) the Bunker Hill area of drilling concern, as expanded under the September 2002 Record of Decision for Operable Unit 3 of the Bunker Hill Mining and Metallurgical Complex, which advises of the nonpotable nature of contaminated aquifers in the Basin and functions as a general prohibition on the use of groundwater within areas such as the Wallace Yard for drinking water or other purposes involving direct human contact; (b) general prohibitions on digging or other actions that would diminish the integrity of soil, gravel, vegetated or asphalt barriers placed as part of the work performed under this SOW-or the Basin Property Remediation Program; (c) written instructions for future, physical actions (e.g. construction, landscaping, maintenance) with potential to impair barriers constructed as part of the work performed under this SOW-or the Basin Property Remediation Program; and (d) authorities to enforce (a)-(c).
- 123 "Basin Property Remediation Program" or "BPRP" shall mean the State program under which residential yard areas are tested and, if needed, remediated for metals in soils, as further described in the Cooperative Agreement for Remedial Action, RACA V-970907-01-6 (July 1, 2008 - June 30, 2009) or later updates. The BPRPand shall also include the relevant provisions of the Basin
- "Canyon Creek" shall mean the former Northern Pacific Railway spur line right-of-way in the Canyon Creek drainage extending from mile marker 0 at the former Wallace-Mullan Branch to approximate mile marker 6.75 near Burke, and the former Washington and Idaho Railroad spur line right-of-way also in the Canyon Creek drainage extending from mile marker 0 at the former Wallace-Mullan Branch to approximate mile marker 6.75 near Burke.

- 1.2.5 "Clean," for purposes of material to be used as fill for barriers or capping, shall mean material that contains mean sample concentrations of less than 100 mg/kg zinc, 100 mg/kg lead, 20 mg/kg arsenic, and 5 mg/kg cadmium. No single sample concentration shall exceed 150 mg/kg lead. Sampling and analysis methods, detection limits, and other QA/QC parameters shall be defined in the QA/QC Plan. For purposes of determining "clean" fill, the Parties anticipate using ICP-AES methodology to meet target detection limits of 50 mg/kg lead and 10 mg/kg arsenic.
- 1.2.6 "Day" shall mean a calendar day, unless expressly stated to be a Working Day. "Working Day" shall mean a day other than a Saturday, Sunday, State, or Federal holiday. In computing any period of time under this SOW, where the last day would fall on a Saturday, Sunday, State, or Federal holiday, the period shall run until the close of business of the next Working Day.
- 1.2.7 "Element(s) of Work" shall mean the specific work elements as set forth in this SOW. Each Element of Work may have multiple Components as specified in this SOW.
- 1.2.8 "Functional Right of Way Width" ("FROWW") shall mean that portion of the former railroad right-of-way width actually used to support for a rail line as evidenced by the visible, existing portions of the rail bed or embankment or the lateral extent of visually identifiable ballast. In addition, for purposes of work to be performed under this SOW, the FROWW must be accessible by humans and therefore represents an area of probable exposure through direct contact with Mine Waste. As examples, the FROWW will generally not include nor extend beyond the following physical boundary limitations:
 - a steep (generally steeper than 2H:1V) slope, cut or hillside;
 - a water body;
 - · dense wooded or hostile vegetation;
 - · bedrock at the surface;
 - surface material that is predominantly rock particles greater than 6 inches in diameter;
 - a paved road (exclusive of road shoulders or unpaved roads);
 - railroad embankment slopes, on the river or creek side, from the top of slope down to the edge of the water;
 - · areas that are seasonally submerged;
 - areas covered with vegetation that is sufficiently dense to preclude easy access to the area; and/or
 - other limitations approved by EPA.

- 1.2.9 "Hercules Mill <u>Site</u>" shall mean the roughly rectangular area depicted on Figure 3-1 of the EE/CA.
- 1.2.10 "Holidays" shall mean those days when the offices of the State or Federal Government are closed for normal business.
- 1.2.11 "Hostile Vegetation" shall mean vegetation that either: (1) is specified as such within the Project Material and Placement Specifications, Attachment D to the SOW, (the PMPS); (2) forms a dense coverage; or (3) contains brambles, vines, thorns, or other attributes that discourage human passage.
- 1.2.12 "Mine Waste" shall mean jig and flotation tailings, mine waste rock, ores, and ore concentrates, all of which are derived from mining activities.
- 1.2.13 "Ninemile" shall mean the former Northern Pacific Railway spur line right-of-way running in Ninemile Canyon from mile marker 0 at the former Wallace-Mullan Branch railroad right-of-way to mile marker 4.75.
- 1.2.14 "Off-Site" shall mean those areas not included within the definition of "On-Site".
- 1.2.15 "On-Site," for purposes of 42 U.S.C. § 96212's permit waiver, means the areal extent of contamination within the Site and all suitable areas in close proximity to that contamination necessary for implementation of the response actions. For purposes of this SOW and the CD, On-Site shall include those areas outside of the Site that have been approved by EPA for use as access roads and staging areas. On-Site shall also include those areas within the Bunker Hill Mining and Metallurgical Complex Superfund Site (Basin) that EPA has approved for disposal, storage, or staging of contaminated material that is generated as a result of this Work.
- 1.2.16 "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria or limitations to be achieved by Settling Defendants in implementing the Elements and Components of Work as set forth in the SOW. The Performance Standards for the Work are specified in Section 2.
- 1.2.17 "PMPS" shall mean the Project Material and Placement Specifications, Attachment D to the SOW.
- 1.2.18 "Remote Areas" shall mean those areas of the Site that are outside of the Residential Areas.
- 1.2.19 "Residential Areas" shall mean those areas of the Site that are within or immediately adjacent to either an incorporated or unincorporated community. Any contamination in the Residential Areas have been and are currently being will be addressed under the 2002 Record of Decision for the Bunker Hill Mining and Metallurgical Complex Superfund Site. State Residential Use Area Program.

- +2.191.2.20 "Response Action" shall mean those activities to be undertaken by the Settling Defendant to implement the response actions identified in the Action Memo and EE/CA and specified in the SOW.
- 1.2.201.2.21 "Site" or "Wallace Yard and Spur Lines Site" shall mean: (1) the Wallace Yard, (2) the Hercules Mill Site, and (3) the Spur Lines. The geographic scope of the Site is depicted generally on Figures 1-1 and 1-2 of the EE/CA, copies of which are attached to the SOW as Attachment A.
- 1.2.211.2.22 "Spur Lines" shall mean the three independent former spur line rights-of-way running from the former Wallace-Mullan Branch railroad right-of-way and extending up Ninemile and Canyon Creek drainages, better described as: (1) the former Northern Pacific Railway spur line right-of-way running in Ninemile Canyon from mile marker 0 at the former Wallace-Mullan Branch railroad right-of-way to mile marker 4.75; (2) the former Northern Pacific Railway spur line right-of-way in the Canyon Creek drainage extending from mile marker 0 at the former Wallace-Mullan Branch railroad right-of-way to approximate mile marker 6.75 near Burke; and (3) the former Washington and Idaho Railroad spur line right-of-way in the Canyon Creek drainage extending from mile marker 0 at the former Wallace-Mullan Branch railroad right-of-way and extending to approximate mile marker 7.25 near Burke.
- "Wallace Yard" shall mean that area located between mile marker 78.5 and mile marker 79.8 of the former Wallace-Mullan Branch railroad right-of-way, excluding the Hercules Mill Site. Wallace Yard is generally depicted on Figure 1-1 of the EE/CA, a copy of which is included in Attachment A.
- 1.2.231.2.24 "Waste Material" shall mean (1) Mine Waste; (2) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (3) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (4) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); (5) any "hazardous waste" under Section 1004(5) of RCRA, 42 U.S.C. § 6904(5) or hazardous constituent as defined at 40 C.F.R. § 260.10 pursuant to RCRA; and (6) any "hazardous material," "hazardous waste," "solid waste," or "toxic" material under applicable Federal or State law.
- 4.2.241.2.25 For purposes of this SOW, "Work" shall mean all activities that Settling Defendants are required to perform under the CD other than those activities required by Consent Decree Sections XVI (Payments for Response Costs) and XXV (Retention of Records).

1.3 Attachments to the SOW

The following attachments to this SOW serve to further define the requirements of the Work to be performed by the Settling Defendants and are hereby made a part of this SOW.

Attachment A: Site Map

Attachment B: Response Action Work Plan ("RA Work Plan")

Attachment C: Response Action Design Drawings ("RAD Drawings")

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• Attachment D: Project Material and Placement Specifications ("PMPS")

Attachment E: Maintenance and Repair Plan ("M&R Plan").

1.4 General Provisions

- 1.4.1 Whenever this SOW uses the terms "include" or "includes," they shall mean "include, but are not limited to," and "includes, but is not limited to," respectively.
- 1.4.2 The Work shall be performed in accordance with the CD, including, but not limited to, this SOW; all standards, plans, specifications, and schedules set forth in or developed pursuant to the CD and this SOW; and any modifications or amendments thereto made pursuant to the terms of this SOW and the CD.
- 1.4.3 Except as otherwise provided for in Section 5, the Work and any final plans, designs, reports, schedules, or proposals developed under this SOW shall be implemented only after receipt of EPA's written approval.
- 1.4.4 The Settling Defendants, EPA and the State have made a good faith effort to precisely define the Work. They acknowledge, however, that despite these efforts, new conditions or information discovered during performance of the Work may dictate changes in the Work. When such new conditions or information are discovered by any of them, it shall promptly notify the others of the discovery. Provided that the Settling Defendants, EPA and the State agree that new conditions or information have been identified, they shall engage in a good faith effort to define and agree what changes in the Work are necessitated by the changed conditions or new information. All such changes in the Work shall be consistent with the Scope of the Response Action as defined within Paragraph 15(b) of the CD. If agreement on the required changes in the Work is reached and if the reopener conditions in Paragraph 86 or 87 of the Consent Decree are satisfied, then the implementation of the changes shall be performed in accordance with either the provisions within Section 1.4.5.3 (for non-material field changes) or Section 1.4.5 (for Technical Memoranda) as applicable. Should the Settling Defendants, EPA and the State fail to reach an agreement as to either the necessity or scope of changes in the Work that is required as a result of the new conditions or information, they shall use the dispute resolution provisions of Section XIX of the
- 1.4.5 Settling Defendants may propose modifications to the Work or to final plans, designs, reports, or schedules developed under this SOW through a Technical Memorandum ("TM"), and shall obtain EPA's written approval of the TM prior to implementing such modifications. The following applies to the use of TMs:
 - 1.4.5.1 Settling Defendants may use a TM to propose that meeting an applicable or relevant and appropriate requirement ("ARAR") under CERCLA is not practicable.
 - 1.4.5.2 Settling Defendants shall not use a TM in lieu of submitting the plans, designs, reports, and schedules required by this SOW.

- 1.4.5.3 A TM is not required for non-material field changes approved by EPA or for schedule changes that expedite the submission of deliverables and/or milestone
- 1.4.6 Settling Defendants shall begin performance of the Work as set forth in Section 5.
- 1.4.7 Except as provided in Section XIV, Paragraphs 52 and 53 (Certification of Completion) of the Consent Decree, Settling Defendants' obligation to perform the work associated with a given Element of Work shall cease as of the effective date of EPA's written approval of the Completion of Obligation Report for that Element of Work.
- Neither the SOW, the plans, any standards, specifications, and schedules, nor any approvals, permits or other permissions that may be granted by EPA related to the CD constitute a warranty or representation of any kind by EPA that this SOW, plans, standards, specifications, schedules, or EPA response action decision documents, when implemented, will achieve the Performance Standards established or to be established, and shall not foreclose EPA from seeking performance of all terms and conditions of the CD or EPA response action decision, provided that the enforcement of such performance standards is not otherwise precluded by the CD. However, the Settling Defendants, EPA and the State anticipate that compliance with the work requirements set forth in this SOW will achieve the Performance Standards. The Work shall include the obligation to achieve the Performance Standards.
- All Work, tasks, and activities undertaken by Settling Defendants pursuant to this SOW and the CD, shall be performed in accordance with all applicable federal, state and local laws and regulations.
- 1.4.10 In accordance with § 300.415(j) of the NCP, removal actions taken pursuant to CERCLA section 106 under this SOW and the CD shall, "...to the extent practicable considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Waivers described in § 300.430(f)(1)(ii)(C) of the NCP may be used for removal actions. Other federal and state advisories, criteria, or guidance may, as appropriate, also be considered in formulating a removal action."
- 1.4.11 To the extent practicable, considering the exigencies of the situation, the Work shall attain applicable or relevant and appropriate requirements under state environmental or facility siting laws as well as advisories, criteria or guidance. Only those state standards that are promulgated, are identified by the state in a timely manner, and are more stringent than federal requirements may be applicable or relevant and appropriate.
- 1.4.12 The CD, including this SOW, is not, and shall not be construed to be, a permit issued pursuant to any federal, state or local statute or regulation.
- 1.4.13 As provided in Section 121(e) of CERCLA and § 300.400(e) of the NCP, no Federal, State, or local permits shall be required for any portion of the Work conducted entirely On-Site.

- 1.4.14 Where any portion of the Work requires a Federal, State or local permit or authorization, Settling Defendants shall submit timely and complete applications for such permits or authorizations and take all other actions necessary to obtain all such permits or authorizations. Settling Defendants or their designee(s) shall be required to obtain and hold any permits needed for implementation of the Work. Settling Defendants may seek relief under the provisions of Section XVIII (Force Majeure) of the CD for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.
- 1.4.15 Wherever commencement of Work or the Period of Performance in this SOW is linked to Settling Defendants' submission of an Initiation of Operation Report, the date that such Work or Period of Performance commences is subject to EPA's written acceptance of that Report. If EPA agrees that necessary conditions have been satisfied, the date Work commenced or Performance ended will be retroactive to the date of Settling Defendants' submission of the Initiation of Operation Report. If EPA does not agree, then the date shall extend until EPA determines that the necessary conditions have been satisfied.
- 1.4.16 When Settling Defendants conclude that all of an individual Element of Work has been fully performed and the Performance Standards have been attained, Settling Defendants shall schedule and conduct a pre-certification inspection to be attended by Settling Defendants, EPA and the State in accordance with the procedures specified in Section XIV of the CD. If, after the precertification inspection, Settling Defendants still believe that all of an individual Element of Work has been fully performed and the Performance Standards have been attained, it shall submit a Completion of Element of Work Report requesting certification of such completion to EPA in accordance with the procedures specified in Section XIV of the CD. In the Completion of Element of Work Report, a registered Professional Engineer and the Settling Defendant's Project Coordinator shall state that the Element of Work covered by the report has been completed in full satisfaction of the requirements of the CD. The written report shall include as-built drawings, if applicable, that are signed and stamped by a Professional Engineer registered in the State of Idaho. The Completion of Element of Work Report shall contain the following statement, signed by responsible corporate officials of each Settling Defendant or the Settling Defendants' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- 1.4.17 All as-built drawings shall be signed and stamped by a registered Professional Engineer of the State of Idaho.
- 1.4.18 Settling Defendants shall coordinate, as appropriate, each Element of Work with all other Elements of Work.
- 1.4.19 Settling Defendants shall, prior to any shipment by them of Waste Material resulting from the Work to an out-of-state waste management facility, provide written notification to the appropriate

state environmental official in the receiving facility's state and to EPA of such shipment of Waste Material.

The written notification shall include the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Settling Defendants shall notify the state in which the planned receiving facility is located of major changes in the shipment, such as a decision to ship the Waste Material to another facility within the same state or to a facility in another state.

The identity of the receiving facility and the state will be determined by Settling Defendants. Settling Defendants shall provide the information required, above, as soon as practicable before the Waste Material is actually shipped.

- 1.4.20 Unless otherwise specified in writing by EPA, Settling Defendants shall submit to EPA an electronic copy and three (3) paper copies of all Deliverables and other submissions required by this SOW. Settling Defendants shall simultaneously submit two (2) copies of all such Deliverables and other submissions to the State.
- 1.4.21 Any repairs or disruptions to community or private infrastructure, such as roads and utilities, that result from the implementation by Settling Defendants of the Work under this SOW shall be performed and coordinated with the affected community, private entity, and government agencies in a timely manner with minimal disruption to service.
- 1.4.22 Actions undertaken by Settling Defendants within the Site shall be coordinated with implementation of the State-Basin Property Remediation Program and other response actions in adjacent areas as appropriate.

2.0 DESCRIPTION OF WORK TO BE PERFORMED, PERFORMANCE STANDARDS AND OBJECTIVES

This Section sets forth the Elements and Components of Work to be performed pursuant to the CD and states the Objectives and Performance Standards for each.

2.1 General Standards Applicable to all Elements and Components of Work

- 2.1.1 Settling Defendants shall demonstrate achievement of the Performance Standards set forth in this Section 2.
- 2.1.2 Unless otherwise specified within a specific work plan for a given Element of Work, achievement of the Performance Standards shall be demonstrated at representative locations and using methods that are proposed by Settling Defendants and are subject to the review of EPA and the State and the approval of EPA.
- 2.1.3 All Work performed and proposals made by Settling Defendants are subject to EPA's written approval.

- 2.1.4 All Work performed by Settling Defendants shall be performed in accordance with the deliverables and schedules set forth under Sections 4 and 5, respectively.
- 2.1.5 Unless otherwise specified, Settling Defendants shall dispose of, or arrange and provide for the disposal of, Waste Materials generated from their performance of the Work.
- 2.1.6 Unless otherwise specified in the RA Work Plan or RAD Drawings, Waste Material generated in the performance of the Work by Settling Defendants that requires disposal shall either be disposed of On-Site or Off-Site in accordance with the following requirements:
 - 2.1.6.1 If disposed of Off-Site such disposal shall be in compliance with all applicable laws and regulations including the Off-Site Disposal Rule (40 C.F.R. 300.440); or
 - 2.1.6.2 If disposed of On-Site, such disposal shall occur within a designated disposal area that is located within the Basin or otherwise managed On-Site in accordance with procedures approved by EPA. Disposal within any designated On-Site disposal areas shall be in accordance with material handling and waste acceptance requirements specified by EPA in consultation with the Idaho Department of Environmental Quality (IDEQ) for the respective disposal area.
- 2.1.7 Unless otherwise approved by EPA, Settling Defendants shall implement, install, and/or use the controls specified below during all construction activities.
 - 2.1.7.1 If evidence of potential archeological sites is encountered during construction, including discovery of athen-ny bones, shards, implements, or other archeological deposits, then all construction activities within the immediate area of the discovery shall stop and immediate notice shall be provided to the EPA Project Coordinator and any necessary archeological inspections shall be coordinated with the agencies that have applicable authorities under state or federal law.
 - 2.1.7.2 Access to active work areas shall be restricted through the use of appropriate measures (e.g., fencing, barricades, etc.). For purposes of this provision, active work areas shall mean those On-Site areas in which construction associated with the Work is occurring and such construction activities would represent a potential safety hazard to the general public if access were not controlled. Active work areas shall also include those On-Site areas where, as a result of the ongoing construction activities, exposure to contaminants is temporarily greater than that which existed prior to the implementation of the construction activities (e.g., stockpiling of contaminateds soils or open excavations).
 - 2.1.7.3 Controls as outlined in work specific health and safety plans shall be implemented to prevent unacceptable contaminant exposures to workers within those On-Site areas described in 2.1.7.2 and adjacent communities.
 - 2.1.7.4 Removals and other excavations conducted as part of the construction activities shall be performed in a manner that allows for proper drainage from the excavated area.

Except as required to protect barriers that are installed as part of the Work or to otherwise correct drainage problems that result from the Work, this provision is not intended to create an obligation for Settling Defendants to improve existing drainage patterns. Existing drainage conveyances will be protected and preserved and will not be impeded by the implementation of the "work" pursuant to the CD and the SOW.

- 2.1.7.5 Construction activities associated with the Work shall be performed in a manner that minimizes the damage to existing vegetation that is located outside of the following areas: where protective barriers or removals are to be performed as part of the implementation of the RA Work Plan; or areas that are to be disturbed as part of approved access and staging areas. Damage to such existing vegetation shall be mitigated as follows:
 - 2.1.7.5.a Areas that contain grass, forbs, and low shrubs shall be seeded with the seed mix specified within the PMPS for the type of habitat encountered (riparian or upland).
 - 2.1.7.5.b In areas where hostile vegetation previously provided access control, hostile vegetation as specified within the PMPS shall be used to mitigate the damage.
 - 2.1.7.5.c Areas, other than Wallace Yard and Hercules Mill Site, where a stand of existing trees in excess of 4 inches in trunk diameter are destroyed shall be mitigated by the installation of small tree plantings as specified in the PMPS on a density that is consistent with the density of the destroyed trees, unless otherwise approved by EPA. This requirement shall not apply to individual trees that may be destroyed incidentally due to damage in the other areas as described in 2.1.7.5.a through b.
- 2.1.7.6 Construction activities shall be conducted in a manner that does not result in the recontamination of areas of removal or protective barriers. If any areas become recontaminated, Any such re-contaminated areas shall be addressed by Settling Defendants in a manner that is subject to the review of EPA and the State and the approval of EPA.
- 2.1.7.7 Construction quality control and quality assurance monitoring shall be conducted in accordance with the provisions of the Project Quality Assurance/Quality Control Plan and be coordinated with EPA's oversight of the Work; however, oversight by EPA shall not in any way relieve the obligation of Settling Defendants to conduct the Work in accordance with the provisions of the CD and Work Plans.
- 2.1.7.8 All construction activities shall be conducted in a manner such that active work sites are maintained in an orderly manner. The sites shall be kept free from accumulations of waste materials, rubbish, and other debris resulting from the work. No later than the end of any construction season and no later than the completion of the

work, waste materials, rubbish, and debris from and about the work area as well as tools, appliances, construction equipment, machinery and surplus materials shall be removed. Any material requiring disposal shall be disposed of in accordance with applicable provisions of this SOW and ARARs.

- 2.1.7.9 Best Management Practices (BMPs) shall be used as specified below during all construction activities to minimize the transport of disturbed material by water, wind erosion, or vehicles.
 - 2.1.7.9.a Settling Defendants shall perform the Work in a manner that minimizes the generation of fugitive dust. If the application of water or other dust suppressants to work areas is used to control the generation and migration of fugitive dust, such application of dust suppressants shall comply with the following requirements:
 - 2.1.7.9.a.(i) Dust suppressants containing brine, or other materials that are harmful to surface water or vegetation shall not be used.
 - 2.1.7.9.a.(ii) Application of dust suppressants shall be performed in a manner that minimizes surface water runoff, over spray of chemical suppressants into surface water bodies, wetlands or other sensitive habitats, and/or generation of muddy conditions.
 - 2.1.7.9.b The following BMPs shall be used to minimize the transport of sediment from work areas:
 - 2.1.7.9.b.(i) Staging areas, accumulation areas and other areas where work is to be performed on exposed slopes shall be isolated with appropriate BMPs to minimize transport of potentially contaminated sediments from the work areas by surface water runoff.
 - 2.1.7.9.b.(ii)

 Construction activities within the ballast section of the rail bed generally will not require isolation as the coarse, granular nature of the ballast is not conducive to transport by surface water runoff during normal storm events.

 However, care shall be taken to conduct the construction activities in a manner that minimizes dispersal of the ballast.

2.1.7.9.b.(iii) The required sedimentation controls shall be maintained throughout the construction activities. Inspection of the sedimentation controls shall occur as necessary to ensure proper function. Repairs, removal, and disposal of accumulated sediments shall be conducted to maintain the function of the controls.

2.1.7.9.b.(iv)

Any dewatering or diversion of surface water and groundwater shall be performed in a manner that complies with IDAPA 58.01.02.250-01(a), in general, minimizinges the release of sediments beyond the work area such that the turbidity outside of and adjacent to the sediment control measures does not exceed background turbidity by more than 50 NTU instantaneously or 25 NTU for more than ten consecutive days.a weekly average of 25 NTU or a daily maximum of 50 NTU.

- 2.1.7.10 Decontamination of equipment prior to the equipment leaving a controlled work area, shall be performed to control physical tracking of contaminants off of the Site. For purposes of this provision, a controlled work area shall mean an area where contaminated material has been disturbed by the construction activities. Adequate decontamination will be determined by visual inspection. Equipment staining without the surface accumulation of material shall not require decontamination. Surface accumulations of materials on the tires and truck body shall be removed either by brushing (or similar activity) or by washing with water.
- 2.1.7.11 All loads of materials that are transported for disposal shall be properly covered to control spills and dust migration. Loads of material delivered to the work area shall be properly covered or otherwise managed to minimize the generation of fugitive dust. Covers shall be appropriate size for the dump bed and shall be in good working condition.
- 2.1.7.12 All construction activities associated with the Work to be performed by Settling Defendants shall be conducted in accordance with applicable spill control and countermeasure procedures that shall be specified in the work plan for that activity.
- 2.1.7.13 Settling Defendants shall provide, install, and maintain barricades, signage, flashers, and other temporary safety measures during the implementation of the Work, in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), and appropriate State and local regulations regarding traffic safety during construction.
- 2.1.7.14 Decontamination of salvageable material (i.e. track, ties, and other track material), if any, shall be performed, as necessary, to remove surface accumulations of material.

Adequate decontamination shall be determined by visual inspection. Handling of the materials will generally result in a surface that requires no further decontamination effort. Staining alone without the accumulation of surficial material will not require decontamination. If necessary, accumulations of surficial material on any salvageable materials shall be removed either by brushing (or similar activity), or by pressure washing with water.

- 2.1.7.15 Any track, ties, or other track materials that are decontaminated in accordance with the requirements of Section 2.1.7.14 and such decontamination is verified by EPA, shall be considered not to be contaminated with or to contain RCRA hazardous waste metals under 40 CFR 261.3(f)(2) and IDAPA 58.01.05.005.
- 2.1.7.16 Any intact ties (as opposed to broken tie debris that are less than a nominal 9 inches in any dimension) that are removed from the rail bed as part of the response actions shall be managed as follows in order to minimize uncontrolled access to these ties by the general public:
 - 2.1.7.16.a Within Residential Areas or areas of the Site that have ready access from public roads, any ties that are removed from the ballast shall be removed from the Site to a staging area or other location having controlled access within 24 hours of the end of each construction day.
 - 2.1.7.16.b In Remote Areas, any ties that are removed from the ballast shall be removed from the Site to a staging area or other location having controlled access within a period of five (5) days of removal from the ballast.
- 2.1.7.17 Other than as expressly provided in the Hercules Mill <u>Site</u> Element of Work, Settling Defendants are not required to sample in an effort to identify possible locations of concentrates. However, to the extent that accumulations of concentrates are identified in the first instance by <u>any reliable means visual inspection</u> during implementation of the response actions, those accumulations shall be removed and properly disposed of as follows:
 - 2.1.7.17.a The concentrate accumulations, if any, shall be removed prior to the performance of any further work that could cause dispersal of the concentrates. Such removals shall meet the following performance requirements:
 - 2.1.7.17.a.(i)

 Removals of concentrate accumulations shall extend to a minimum of 12 inches laterally from the edges of the visually identifiable concentrate and to a minimum depth of 6 inches below the vertical extent of the visually identifiable concentrate.

Wallace Yard and Spur Lines Site SOW

If placed on the ground, excavated concentrate

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		material shall be underlain by plastic sheeting.	
	2.1.7.17.a.(iii)	Be cordoned off using construction fencing or other appropriate access controls to prevent unacceptable exposure to the concentrate materials.	
2.1.7.17.b	Any temporary stoc remain overnight sh	kpiles of excavated concentrate material that will all:	
	2.1.7.17.b.(i)	Be located, bermed or ditched to prevent run-on of surface water into the material.	
	2.1.7.17.b.(ii)	Except when placement of material into the stockpile is occurring, the stockpile shall be completely covered with plastic sheeting to prevent precipitation from falling on the material and to prevent run-off of contaminated water and sediment.	
2.1.7.17.c	within a portion of	centrate material that is temporarily stockpiled the Site that does not have controlled access shall 48 hours of excavation.	
2.1.7.17.d	Any concentrates shall be disposed of in accordance with procedures specified within the Response Action Work Plan.		
		defined in the Project Construction Schedule in 5 Settling Defendants shall:	
2.1.7.18.a	Post signs at locations specified in the Response Action Work Plan (Attachment B to this SOW) that identifies a point of contact including a telephone number for Settling Defendants' representative to respond to questions by the public pertaining to the Work.		
2.1.7.18.b	Notify the appropriate representative of incorporated communities and counties along the Site of the start of the Work: —Ffor unincorporated communities, notice coordination—shall be provided to conducted with county commissioners.		

2.1.7.18

2.1.7.17.a.(ii)

2.2 Wallace Yard Element of Work

2.2.1 General Description

The Wallace Yard Element of Work includes the isolation of Mine Waste from certain potential exposure pathways through removals and disposal as well as the placement of protective barriers. There are no residential use areas in Wallace Yard, so the focus of this Element of Work is common use areas. The components of this Element of Work are specified in the Response Action Design Drawings (RAD Drawings) (Attachment C to this SOW). A design narrative and supporting details for the RAD Drawings are provided in the Response Action Work Plan (RA Work Plan) (Attachment B to this SOW). This Element of Work includes the following:

- Removal of contaminated soil from common use areas in Wallace Yard as specified in the RAD Drawings and RA Work Plan;
- Disposal of the removed material either On-Site (locations approved by EPA) or Off-Site;
 and
- Placement of vegetated, gravel, and asphalt barriers at specified locations in common use areas within Wallace Yard.

2.2.2 Performance Objectives

The objectives of the Wallace Yard Element of Work and its components are to:

- Prevent unacceptable human exposure to Mine Waste and material contaminated with Mine Waste, as described below in Section 2.2.3;
- Minimize migration of Mine Waste and material contaminated with Mine Waste on and off of the Wallace Yard;
- Minimize the damage to non-abandoned structures, amenities, and vegetation;
- Properly dispose of any Waste Materials that may be generated during implementation of this Element of Work; and
- Minimize the disruptions and construction related impacts to local traffic, drainage patterns, roads, utilities, property owners, and communities.
- Prevent erosion or destabilization of existing slopes and embankments.

2.2.3 Performance Standards

The performance standards for the Wallace Yard Element of Work represent the requirements for this Element of Work and its components. The performance standards are organized by each component of this Element of Work.

- 2.2.3.1 <u>General Requirements:</u> The following performance standards are applicable to all components of this Element of Work:
 - 2.2.3.1.a Disturbance of existing vegetated areas that are to serve as part of a protective barrier (identified in the RAD Drawings) shall require extension of the placed protective barrier into the area of disturbance as part of the Gravel and Vegetated Barriers Component of Work.
- 2.2.3.2 <u>Removals and Disposal Component of Work:</u> The performance standards for removals are as follows:
 - 2.2.3.2.a In the Wallace Yard Visitor Center Area west of road and south of I-90:
 - 2.2.3.2.a.(i) Based on previously obtained sampling results, removal of soils with lead concentrations greater than 700 mg/kg to a depth of 1 foot;
 - 2.2.3.2.a.(ii) placement of clean fill to ensure a 12-inch clean barrier in all areas; and
 - 2.2.3.2.a.(iii) placement of a vegetated barrier as specified by the RAD Drawings and RA Work Plan.
 - 2.2.3.2.b In the Wallace Yard Visitor Center Parking Area east of road and south of I-90, limited removal of soils at the edge of the barrier area to maintain a smooth transition as specified by the RAD Drawings and RA Work Plan.
 - 2.2.3.2.c In Area WY-4 of Wallace Yard, removal and/or capping in the area of sample WY-148 only, as specified by the RAD Drawings and RA Work Plan.
- 2.2.3.3 Other Removals and Disposal Component of Work: In addition to the removals described above, additional selected removals may be performed in certain localized areas of Wallace Yard:
 - 2.2.3.3.a Previously Unidentified Hazardous Substance Release Areas: If previously unidentified locations of releases of hazardous substances resulting from prior railroad operations are discovered in Wallace Yard during implementation of the various components of work, and if such previously unidentified locations of releases of hazardous substances present an unacceptable risk to human health and the environment, such releases shall be addressed in accordance with section VII of the Consent Decree. Settling Defendants, EPA or the State may propose the following:

Wallace Yard and Spur Lines Site SOW

2.2.3.3.a.(i) Unless otherwise approved by EPA, the location shall be sampled and the samples analyzed in accordance with a sampling and analysis plan that is subject to the review of EPA and the State and approval of EPA.

2.2.3.3.a.(ii) Based on the sampling and analytical results and consultation with EPA, Settling Defendants shall make an evaluation as to whether any follow-up action is required for the area. If the evaluation indicates that additional activities, consistent with the Scope of the Response Action as defined within Paragraph 15(b) of the CD, are necessary (i.e. removals, placement of protective barriers, etc.) and if the reopener conditions in Paragraph 86 or 87 of the Consent Decree are satisfied, then a plan for implementation of the response activities shall be developed. The evaluation and plan shall consider the type of material found, concentration in the affected area, available site access, and potential impact on the surrounding communities and the environment.

2.2.3.3.a.(iii) The evaluation and proposed plan of action, including all related analytical data results from the sampling shall be provided to EPA no later than thirty (30) calendar days from receipt of sampling results. The response action for the area shall be subject to the review of EPA and the State and EPA approval.

2.2.3.3.a.(iv)

If the Settling Defendants, EPA and the State cannot agree upon a response action for addressing such previously unidentified release areas, resolution of the disagreement shall be subject to the dispute resolution provisions of the CD.

2.2.3.4 <u>Gravel and Vegetated Barriers Component of Work:</u> The performance standards for the gravel and vegetated soil barriers component of work are as follows:

2.2.3.4.a General Requirements

2.2.3.4.a.(i) Except for the Visitor Center, gravel barriers shall be placed within Wallace Yard at the

locations and in the manner specified by the applicable RAD Drawings and the RA Work Plan.

2.2.3.4.b Material requirements

2.2.3.4.b.(i)	Gravel barriers shall consist of clean gravel
	material meeting the requirements specified in
	the PMPS and shall be 12 inches in minimum
	thickness or as specified by the RAD Drawings.

- 2.2.3.4.b.(ii)

 Visual markers shall be installed beneath gravel and vegetated barriers as specified by the RAD Drawings. These markers shall meet the material and installation requirements specified by the PMPS and applicable RAD Drawings.
- 2.2.3.4.b.(iii) Vegetated barriers shall consist of clean soil meeting the requirements specified in the PMPS and shall be either 6 inches or 12 inches in minimum thickness or as specified by the RAD Drawings.
- 2.2.3.4.b.(iv) The vegetated barrier at the Visitor Center shall be sod as specified by the PMPS.
- 2.2.3.5 <u>Hydroseed Component of Work.</u> Hydroseeding shall be used to promote vegetative cover for erosion control in Area WY-4 and the unpaved area between access ramps and the main roadway of I-90 as specified by the RAD Drawings and the RA Work Plan.
- 2.2.3.6 Maintenance and Repair Component of Work. The Basin ICP governs maintenance and repair of the barriers installed under this Element of Work shall be maintained and prepared consistent with the Basin ICP and Attachment E (Maintenance and Repair Plan). In any transfer of property subject to this Element of Worksale, Owner Settling Defendant(s) shall expressly require the transferee purchaser to assume all these maintenance and repair obligations under this Element of Work.

2.3 Hercules Mill Site Element of Work

2.3.1 General Description

The Hercules Mill <u>Site</u> Element of Work includes the isolation of Mine Waste from certain potential exposure pathways through removals and disposal as well as the placement of protective barriers. The components of this Element of Work are specified in the Response Action Design Drawings (RAD Drawings) (Attachment C to this SOW). A design narrative and supporting

details for the RAD Drawings are provided in the Response Action Work Plan (RA Work Plan) (Attachment B to this SOW). This Element of Work includes the following:

- Removal of contaminated soil from common use areas of the Hercules Mill Site as specified in the RAD Drawings and RA Work Plan;
- Sampling within the former foundation area at the Hercules Mill Seite;
- Disposal of the removed material either On-Site (locations approved by EPA) or Off-Site;
- Placement of vegetated and gravel barriers at specified locations in common use areas within the Hercules Mill Site;
- Placement of access controls at specified locations at the Hercules Mill Site; and
- Removal and proper disposal of any concentrate accumulations that may be visually identified during implementation of this Element of Work.

2.3.2 Performance Objectives

The objectives of the Hercules Mill Site Element of Work and its components are to:

- Prevent unacceptable human exposure to Mine Waste and material contaminated with Mine Waste as described below in Section 2.3.3;
- Minimize migration of Mine Waste and material contaminated with Mine Waste on and off of the Hercules Mill Seite;
- Minimize the damage to non-abandoned structures, amenities, and vegetation;
- Protect barriers from damage due to unauthorized access;
- Properly dispose of any Waste Materials that may be generated during implementation of this Element of Work;
- Minimize dispersal of contaminants from off of the Hercules Mill Site and sequence conduct
 work sequencing in such a manner so as to avoid cross contamination of clean barriers
 installed pursuant to this SOW or other response actions.
- Characterize and respond to remaining previously unidentifed releases of hazardous substances within the Hercules Mill Site, consistent with as defined in section X.XX of this SOW.
- Minimize the disruptions and construction related impacts to local traffic, drainage patterns, roads, utilities, property owners, and communities; and

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Wallace Yard and Spur Lines Site SOW

Remove and properly dispose of any concentrate accumulations that may be visually
identified during implementation of this Element of Work.

2.3.3 Performance Standards

The performance standards for the Hercules Mill-Mill Site Element of Work represent the requirements for this Element of Work and its components. The performance standards are organized by each component of this Element of Work.

- 2.3.3.1 <u>General Requirements:</u> The following performance standards are applicable to all components of this Element of Work:
 - 2.3.3.1.a Disturbance of existing vegetated areas that are to serve as part of a protective barrier (identified in the RAD Drawings) shall require extension of the placed protective barrier into the area of disturbance as part of the Gravel and Vegetated Barriers Component of Work.
- 2.3.3.2 <u>Removals and Disposal Component of Work:</u> The performance standards for removals are as follows:
 - 2.3.3.2.a Sampling within the former foundation area to determine if there are any materials present in concentrations that are equal to or exceed the applicable waste acceptance criteria for the given disposal site.
 - 2.3.3.2.b Decontaminate foundations in a manner that meets the Performace Standards and Objectives of this SOW and avoids unacceptable exposure for the cleanup personnel, recreational trail users, and the nearby community by brushing (or similar activity) or by washing with water.
 - 2.3.3.2.c Restrict access to foundations.
 - 2.3.3.2.d Remove and dispose of soils as specified by the RAD Drawings and RA Work Plan.
 - 2.3.3.2.e Grade and place 12-inch vegetated or gravel barrier as specified by the RAD Drawings and RA Work Plan
- 2.3.3.3 Other Removals and Disposal Component of Work: In addition to the removals described above, additional selected removals may be performed in certain localized areas of the Hercules Mill Ssite:

- 2.3.3.3.a <u>Household Refuse and Construction Debris.</u> Remove and properly dispose of miscellaneous household refuse, and construction debris, and miscellaneous woody debris east of the foundations.
- 2.3.3.3.b Previously Unidentified Hazardous Substance Release Areas: If previously unidentified locations of releases of hazardous substances resulting from prior railroad or mill operations are discovered at the Hercules Mill Site during the implementation of various components of work, and if such previously unidentified locations of releases of hazardous substances present an unacceptable risk to human health and the environment, such releases shall be addressed in accordance with section VII of the Consent Decree. Settling Defendants, EPA or the State may propose the following:
 - 2.3.3.3.b.(i) Unless otherwise approved by EPA, the location shall be sampled and the samples analyzed in accordance with a sampling and analysis plan that is subject to the review of EPA and the State and approval of EPA.
 - 2.3.3.3.b.(ii) Based on the sampling and analytical results and consultation with EPA, Settling Defendants shall make an evaluation as to whether any follow-up action is required for the area. If the evaluation indicates that additional activities, consistent with the Scope of the Response Action as defined within Paragraph 15(b) of the CD, are necessary (i.e. removals, placement of protective barriers, etc.) and if the reopener conditions in Paragraph 86 or 87 of the Consent Decree are satisfied, then a plan for implementation of the response activities shall be developed. The evaluation and plan shall consider the type of material found, concentration in the affected area, available site access, and potential impact on the surrounding communities and the environment.
 - 2.3.3.3.b.(iii) The evaluation and proposed plan of action, including all related analytical data results from the sampling shall be provided to EPA no later than thirty (30) calendar days from receipt of sampling results. The response action for the area shall be subject to the review of EPA and the State and approval of EPA.

2.3.3.3.b.(iv)

If the Settling Defendants, EPA and the State cannot agree upon a response action for addressing such previously unidentified release areas, resolution of the disagreement shall be subject to the dispute resolution provisions of the CD.

2.3.3.3.c Previously Unidentified Concentrate Accumulations: Visually identifiable accumulations of ore concentrate material, if any, that are found during implementation of the Hercules Mill Site Element of Work shall be removed and properly disposed of as specified in Section 2.1.7.17.

2.3.3.4 <u>Gravel and Vegetated Barriers Component of Work:</u> The performance standards for the gravel and vegetated soil barriers component of work are as follows:

2.3.3.4.a General Requirements

2.3.3.4.a.(i) Gravel and vegetated barriers shall be placed within the Hercules Mill Site at the locations and in the manner specified by the applicable RAD Drawings and the RA Work Plan.

2.3.3.4.a.(ii) The specific choice of gravel or vegetated barrier at a given location shall be as specified by the applicable RAD Drawings.

2.3.3.4.b Material requirements

2.3.3.4.b.(i) Gravel barriers shall consist of clean gravel material meeting the requirements specified in the PMPS and shall be 12 inches in minimum thickness or as specified by the RAD Drawings.

2.3.3.4.b.(ii)

Visual markers shall be installed beneath gravel and vegetated barriers as specified by the RAD Drawings. These markers shall meet the material and installation requirements specified by the PMPS and applicable RAD Drawings.

2.3.3.4.b.(iii)

Vegetated barriers shall consist of clean soil meeting the requirements specified in the PMPS and shall be either 6 inches or 12 inches in minimum thickness or as specified by the RAD Drawings.

2.3.3.4.b.(iv)

Except in Residential AreaUAs, Yvegetated barriers shall be hydro seeded as specified within the PMPS. For Residential AreaUAs, grass sod will be used as consistent with the BPRP and as specified within the PMPS.

2.3.3.5 <u>Hydroseed Component of Work.</u> Mulch and Tackifier shall be added and hydroseeding shall be used to promote vegetative cover for erosion control on the bare hillside above foundations, consistent with s. The Specifications tofor this shall be be as defined in the PMPS.

2.3.3.6 <u>Access Control Component of Work.</u>

2.3.3.6.a Erect chain link fence as specified by the RAD Drawings and RA Work Plan to control access to the Hercules Mill <u>Site</u> and to restrict unauthorized access to the Hercules Mill <u>Site</u>.

2.3.3.6.b Place signage as specified in the RAD Drawings and RA Work Plan to indicate no trespassing.

2.3.3.7 Maintenance and Repair Component of Work. The Basin ICP governs maintenance and repair of the barriers installed under this Element of Work shall be maintained and repaired consistent with the Basin ICP and Attachment E (Maintenance and Repair Plan). In any transfer of property subject to this Element of Worksale, Owner Settling Defendant(s) shall expressly require the transferee purchaser to assume all these maintenance and repair obligations under this Element of Work.

2.4 Ninemile Element of Work

2.4.1 General Description

The Ninemile Element of Work includes the isolation of Mine Waste from certain potential exposure pathways through removals and disposal as well as the placement of protective barriers. The components of this Element of Work are specified in the Response Action Design Drawings (RAD Drawings) (Attachment C to this SOW). A design narrative and supporting details for the RAD Drawings are provided in the Response Action Work Plan (RA Work Plan) (Attachment B to this SOW). This Element of Work includes the following:

- Remediation of road shoulders that are within the FROWW and within 1000 feet of residences, as measured along the length of the road;
- Disposal of the removed material either On-Site (locations approved by EPA) or Off-Site;
- Placement of vegetated, gravel, and asphalt barriers at specified locations as shown on the RAD Drawings and RA Work Plan; and

Coordination with the <u>State BPRPRUA P program through</u> which the <u>State will conduct</u> remediation of residential use areas within the former railroad right-of-way.

2.4.2 Performance Objectives

The objectives of the Ninemile Element of Work and its components are to:

- Prevent unacceptable human exposure to Mine Waste and material contaminated with Mine Waste as described below in Section 2.4.3;
- Prevent slope destabilization along railroad embankments and in all work areas;
- Address destabilized slopes to prevent transport of materials to surface waters;
- Minimize migration of Mine Waste and material contaminated with Mine Waste on and off
 of the <u>current and/or</u> former railroad right-of-way;
- · Minimize the damage to non-abandoned structures, amenities, and vegetation;
- Properly dispose of any Waste Materials that may be generated during implementation of this Element of Work;
- · Minimize erosion into the creek;
- Minimize the dispersal of contamination to those portions of the former railroad right-of-way that are not projected to receive response actions;
- Preserve and protect existing barriers implemented as part of other response actions as well as
 those implemented under this SOW.
- Characterize and respond to any previously unidentified releases of hazardous substances
- Remove and properly dispose of any concentrate accumulations identified during implementation of this Element of Work; and
- Minimize the disruptions and construction related impacts to local traffic, drainage patterns, roads, utilities, property owners, and communities.

2.4.3 Performance Standards

The performance standards for the Ninemile Element of Work represent the requirements for this Element of Work and its components. The performance standards are organized by each component of this Element of Work.

2.4.3.1 <u>General Requirements:</u> The following performance standards are applicable to all components of this Element of Work:

- 2.4.3.1.a Disturbance of existing vegetated areas that are to serve as part of a protective barrier (identified in the RAD Drawings) shall require extension of the placed protective barrier into the area of disturbance as part of the Gravel and Vegetated Barriers Component of Work.
- 2.4.3.1.b All removals along that portion of the FROWW that serves as a road shoulder shall be performed in a manner that allows for a smooth transition in any required grade changes. Any such transitions shall match adjacent road grade longitudinally and provide a smooth transition laterally to avoid an abrupt dropoff from the road.not exceed a grade of five per cent (5 feet vertical per 100 feet horizontal).
- 2.4.3.2 Removals and Disposal Component of Work: The performance standards for removals are as follows:
 - 2.4.3.2.a For road shoulders and RUAResidential Areas that are within the FROWW and within 1000 feet of residences, as measured along the length of the road, based on sampling, removal of soils with lead concentrations greater than 700 mg/kg to a depth of 1 foot. The 1000 feet shall be measured from a line that extends perpendicular from the centerline of the former railroad right-of-way to the outermost point of the outermost residential structure.
 - 2.4.3.2.b Removal of tailings bank between mile marker 1.25 and mile marker 2.25.
- 2.4.3.3 Other Removals and Disposal Component of Work: In addition to the removals described above, additional selected removals may be performed in certain localized areas of the former Ninemile Spur Line railroad right-of-way:
 - 2.4.3.3.a Miscellaneous Rail MaterialDebris Removals: If necessary to allow implementation of other components of this Element of Work, Settling Defendants shall remove individual pieces of ties that exceed a nominal 9 inches measured in any dimension and other debris that exceeds a nominal 6 inches measured in any dimension. This removed material shall be disposed of in accordance with the disposal requirements specified in Section 2.1.7. Excavation below these individual pieces of ties or debris is not required unless there is visual or other evidence of suspected contamination associated with the individual pieces of ties or debris. Any remaining rail or other track materials shall be removed from existing roads and the top of embankments. Existing roads shall be repaired after removal of rail materials.

2.4.3.3.b Previously Unidentified Hazardous Substance Release Areas: If previously unidentified, locations of releases of hazardous substances resulting from prior railroad operations are discovered within the former Ninemile Spur Line railroad right-of-way during implementation of the various components of work, and if such previously unidentified locations of releases of hazardous substances present an unacceptable risk to human health and the environment, such releases shall be addressed in accordance with section VII of the Consent Decree. Settling Defendants, EPA or the State may propose the following:

2.4.3.3.b.(i) Unless otherwise approved by EPA, the location shall be sampled and the samples analyzed in accordance with a sampling and analysis plan that is subject to the review of EPA and the State and approval of EPA.

2.4.3.3.b.(ii)

Based on the sampling and analytical results and consultation with EPA, Settling Defendants shall make an evaluation as to whether any follow-up action is required for the area. If the evaluation indicates that additional activities, consistent with the Scope of the Response Action as defined within Paragraph 15(b) of the CD, are necessary (i.e. removals, placement of protective

defined within Paragraph 15(b) of the CD, are necessary (i.e. removals, placement of protective barriers, etc.) and if the reopener conditions in Paragraph 86 or 87 of the Consent Decree are satisfied, then a plan for implementation of the response activities shall be developed. The evaluation and plan shall consider the type of material found, concentration in the affected area, available site access, and potential impact on the surrounding communities and the

environment.

2.4.3.3.b.(iii) The evaluation and proposed plan of action, including all related analytical data results from the sampling shall be provided to EPA no later than thirty (30) calendar days from receipt of sampling results. The response action for the area shall be subject to the review of EPA and

the State and approval of EPA.

2.4.3.3.b.(iv) If the Settling Defendants, EPA and the State cannot agree upon a response action for addressing such previously unidentified release

areas, resolution of the disagreement shall be subject to the dispute resolution provisions of the CD.

Gravel and Vegetated Barriers Component of Work: The performance standards for 2.4.3.4 the gravel and vegetated soil barriers component of work are as follows:

2.4.3.4.a	General Requirements
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2.4.3.4.a.(i) Gravel and vegetated barriers shall be placed within the former Ninemile Spur Line railroad right-of-way at the locations and in the manner specified by the applicable RAD Drawings and

the RA Work Plan.

The specific choice of gravel or vegetated 2.4.3.4.a.(ii) barrier at a given location shall be as specified

by the applicable RAD Drawings.

2.4.3.4.b Material requirements

2.4.3.4.b.(i) Gravel barriers shall consist of clean gravel material meeting the requirements specified in the PMPS and shall be 12 inches in minimum

thickness or as specified by the RAD Drawings.

2.4.3.4.b.(ii) Visual markers shall be installed beneath gravel

and vegetated barriers as specified by the RAD Drawings. Visual markers are not required where the gravel barrier underlies an asphalt barrier or shoulder gravel that has been installed as part of the Work. These markers shall meet the material and installation requirements specified by the PMPS and applicable RAD

Drawings.

2.4.3.4.b.(iii) Vegetated barriers shall consist of clean soil

meeting the requirements specified in the PMPS and shall be 12 inches in minimum thickness or

as specified by the RAD Drawings.

2.4.3.4.b.(iv) Vegetated barriers shall be hydroseeded as

specified by the PMPS.

2.4.3.4.c Lateral dimensions and thickness requirements for the barriers

2.4.3.4.c.(i) The width of barriers shall extend laterally over the FROWW or as specified by the RAD Drawings.

- 2.4.3.5 <u>Asphalt Barriers Component of Work:</u> The performance standards for the asphalt barriers component of work are as follows:
 - 2.4.3.5.a Asphalt barriers shall be placed at the locations and in the manner specified by the applicable RAD Drawings and the RA Work Plan.
 - 2.4.3.5.b Asphalt barriers shall meet the specifications included in the Basin ICP and PMPS and will meet minimum requirements established by local, county, or State jurisdictions based on the use of the paved area.
 - 2.4.3.5.c Asphalt barriers shall extend laterally over the FROWW unless otherwise specified by the RAD Drawings.
- 2.4.3.6 <u>Maintenance and Repair</u>. The <u>Basin ICP governs maintenance and repair of the</u> barriers installed under this Element of Work <u>shall be subject to requirements of the Basin ICP-.</u>

2.5 Canyon Creek Element of Work

2.5.1 General Description

The Canyon Creek Element of Work includes the isolation of Mine Waste from certain potential exposure pathways through removals and disposal as well as the placement of protective barriers. The components of this Element of Work are specified in the Response Action Design Drawings (RAD Drawings) (Attachment C to this SOW). A design narrative and supporting details for the RAD Drawings are provided in the Response Action Work Plan (RA Work Plan) (Attachment B to this SOW). This Element of Work includes the following:

- Remediation of road shoulders that are within the FROWW and within 1000 feet of residences, as measured along the length of the road;
- Disposal of the removed material either On-Site (locations approved by EPA) or Off-Site;
- Placement of vegetated, gravel, and asphalt barriers at specified locations as shown on the RAD Drawings and RA Work Plan; and
- Coordination with the <u>State BPRPRUA Program program through</u> which <u>the State</u> will
 conduct remediation of residential use areas within the former railroad rights-of-way.

2.5.2 Performance Objectives

The objectives of the Canyon Creek Element of Work and its components are to:

- Prevent unacceptable human exposure to Mine Waste and material contaminated with Mine Waste as described in Section 2.5.3 below;
- Prevent slope destabilization along railroad embankments and in all work areas;
- Address destabilized slopes to prevent transport of materials to surface waters;
- Minimize migration of Mine Waste and material contaminated with Mine Waste on and off of the current and/or former railroad rights-of-way;
- Minimize the damage to non-abandoned structures, amenities, and vegetation;
- Properly dispose of any Waste Materials that may be generated during implementation of this Element of Work;
- · Minimize erosion into the creek;
- Minimize the dispersal of contamination to those portions of the former railroad rights-ofway that are not projected to receive response actions;
- Preserve and protect existing barriers implemented as part of other response actions as well as those implemented under this SOW.
- Characterize and respond to any previously unidentified releases of hazardous substances
- Remove and properly dispose of any concentrate accumulations identified during implementation of this Element of Work; and
- Minimize the disruptions and construction related impacts to local traffic, drainage patterns, roads, utilities, property owners, and communities.

2.5.3 Performance Standards

The performance standards for the Canyon Creek Element of Work represent the requirements for this Element of Work and its components. The performance standards are organized by each component of this Element of Work.

- 2.5.3.1 <u>General Requirements:</u> The following performance standards are applicable to all components of this Element of Work:
 - 2.5.3.1.a Disturbance of existing vegetated areas that are to serve as part of a protective barrier (identified in the RAD Drawings) shall require

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extension of the placed protective barrier into the area of disturbance as part of the Gravel and Vegetated Barriers Component of Work.

- 2.5.3.1.b All removals along that portion of the FROWW that serves as a road shoulder shall be performed in a manner that allows for a smooth transition in any required grade changes. Any such transitions shall not exceed a grade of five per cent (5 feet vertical per 100 feet horizontal).
- 2.5.3.2 <u>Removals and Disposal Component of Work:</u> The performance standards for removals are as follows:
 - 2.5.3.2.a For road shoulders that are within the FROWW and within 1000 feet of residences, as measured along the length of the road, based on sampling, removal of soils with lead concentrations greater than 700 mg/kg to a depth of 1 foot. The 1000 feet shall be measured from a line that extends perpendicular from the centerline of the former railroad right-of-way to the outermost point of the outermost residential structure.
- 2.5.3.3 Other Removals and Disposal Component of Work: In addition to the removals described above, additional selected removals may be performed in certain localized areas of the former Canyon Creek Spur Line railroad rights-of-way:
 - 2.5.3.3.a Miscellaneous Rail Material Removals: If necessary to allow implementation of other components of this Element of Work, Settling Defendants shall remove individual pieces of ties that exceed a nominal 9 inches measured in any dimension and other debris that exceeds a nominal 6 inches measured in any dimension. This removed material shall be disposed of in accordance with the disposal requirements specified in Section 2.1.7. Excavation below these individual pieces of ties or debris is not required unless there is visual or other evidence of suspected contamination associated with the individual pieces of ties or debris. Any remaining rail or other track materials shall be removed from existing roads and the top of embankments. Existing roads shall be repaired after removal of rail materials.
 - 2.5.3.3.a.2.5.3.3.b Previously Unidentified Hazardous Substance Release Areas: If previously unidentified locations of releases of hazardous substances resulting from prior railroad operations are discovered within the former Canyon Creek Spur Line railroad rights-of-way during the implementation of various components of work, and if such previously unidentified locations of releases of hazardous substances present an unacceptable risk to human health and the environment, such releases shall be addressed in accordance with section VII of

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the Consent Decree. Settling Defendants, EPA or the State may propose the following:

2.5.3.3.a.(i)2.5.3.3.b.(i)

Unless otherwise approved by EPA, the location shall be sampled and the samples analyzed in accordance with a sampling and analysis plan that is subject to the review of EPA and the State and approval of EPA.

2.5.3.3.a.(ii)2.5.3.3.b.(ii) _Based on the sampling and analytical results and consultation with EPA, Settling Defendants shall make an evaluation as to whether any follow-up action is required for the area. If the evaluation indicates that additional activities, consistent with the Scope of the Response Action as defined within Paragraph 15(b) of the CD, are necessary (i.e. removals, placement of protective barriers, etc.) and if the reopener conditions in Paragraph 86 or 87 of the Consent Decree are satisfied, then a plan for implementation of the response activities shall be developed. The evaluation and plan shall consider the type of material found, concentration in the affected area, available site access, and potential impact on the surrounding communities and the environment.

2.5.3.3.a.(iii)2.5.3.3.b.(iii) ___ The evaluation and proposed plan of action, including all related analytical data results from the sampling shall be provided to EPA no later than thirty (30) calendar days from receipt of sampling results. The response action for the area shall be subject to the review of EPA and the State and approval of EPA.

2.5.3.3.a.(iv)2.5.3.3.b.(iv) If the Settling Defendants, EPA and the State cannot agree upon a response action for addressing such previously unidentified release areas, resolution of the disagreement shall be subject to the dispute resolution provisions of the CD.

2.5.3.4 $\underline{Gravel\ and\ Vegetated\ Barriers\ Component\ of\ Work:}}\ The\ performance\ standards\ for\ the\ gravel\ and\ vegetated\ soil\ barriers\ component\ of\ work\ are\ as\ follows:$

2.5.3.4.a	General Requirements			
	2.5.3.4.a.(i)	Gravel and vegetated barriers shall be placed within the former Canyon Creek Spur Line railroad rights-of-way at the locations and in the manner specified by the applicable RAD Drawings and the RA Work Plan.		
	2.5.3.4.a.(ii)	The specific choice of gravel or vegetated barrier at a given location shall be as specified by the applicable RAD Drawings.		
2.5.3.4.b	Material requireme	ents		
	2.5.3.4.b.(i)	Gravel barriers shall consist of clean gravel material meeting the requirements specified in the PMPS and shall be 12 inches in minimum thickness or as specified by the RAD Drawings.		
	2.5.3.4.b.(ii)	Visual markers shall be installed beneath gravel and vegetated barriers as specified by the RAD Drawings. Visual markers are not required where the gravel barrier underlies an asphalt barrier or shoulder gravel that has been installed as part of the Work. These markers shall meet the material and installation requirements specified by the PMPS and applicable RAD Drawings.		
	2.5.3.4.b.(iii)	Vegetated barriers shall consist of clean soil meeting the requirements specified in the PMPS and shall be 12 inches in minimum thickness or as specified by the RAD Drawings.		
	2.5.3.4.b.(iv)	Vegetated barriers shall be hydroseeded as specified by the PMPS.		
2.5.3.4.c	Lateral dimensions	and thickness requirements for the barriers		
	2.5.3.4.c.(i)	The width of barriers shall extend laterally over the FROWW or as specified by the RAD Drawings.		

2.5.3.5	Asphalt Barriers Component of Work: The performance standards for the asphalt
	barriers component of work are as follows:

2.5.3.5.a	Asphalt barriers shall be placed at the locations and in the manner
	specified by the applicable RAD Drawings and the RA Work Plan.

- 2.5.3.5.b Asphalt barriers shall meet the specifications included in the Basin ICP and PMPS and will meet minimum requirements established by local, county or State jurisdictions based on the use of the paved area.
- 2.5.3.5.c Asphalt barriers shall extend laterally over the FROWW unless otherwise specified by the RAD Drawings.
- 2.5.3.6 <u>Maintenance and Repair</u>. The <u>Basin ICP governs maintenance and repair of the</u> barriers installed under this Element of Work <u>shall be subject to requirements of the</u> Basin ICP-.

2.6 Maintenance and Repair

2.6.1 **Performance Objectives**

The performance objectives of the M&R Element of Work are to:

- Preserve the integrity of the protective barriers that will be installed as part of the response action;
- Preserve the effectiveness of constructed access controls as necessary to restrict access for purposes managing exposure and protection of barriers; and
 - Maintain controls to prevent erosion or slope destabilization along railroad embankments and all work areas.

2.6.2 **Performance Standards.**

The performance standards for the M&R Element of Work are as follows:

- 2.6.2.1 M&R activities shall be performed in accordance with the requirements specified in the M&R Plan and this Section 2.6.
- 2.6.2.2 Unless otherwise approved by the EPA, Owner Settling Defendants shall conduct monthly and storm event driven inspections of the Wallace Yard and Hercules Mill Site, for the duration of their ownership of these properties, as specified in M&R Plan. EPA and the State shall be notified at least 7 calendar days before the commencement of monthly inspections. EPA and the State shall also be notified before the commencement of storm event inspections

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Wallace Yard and Spur Lines Site SOW

2.6.2.3 For the duration of their ownership, Owner Settling Defendants shall perform routine maintenance activities within the Wallace Yard and Hercules Mill Site as follows:

2.6.2.3.1 Monthly maintenance and repair that is determined, in accordance with the M&R Plan, to be necessary as a result of the monthly inspections shall be performed as specified in the M&R Plan.

2.6.2.3.2 If the monthly or storm event inspections specified in the M&R Plan find or if EPA notifies Owner Settling Defendants of conditions defined in the M&R Plan that represent indications of actual or imminent barrier failure that requires a response before the next scheduled maintenance and repair activities, then such repair shall be performed in accordance with the M&R Plan

2.6.2.4 For the duration of their ownership, Owner Settling Defendants shall repair non-routine damage of embankments, access controls, or protective barriers in accordance with a work plan that is subject to the review of EPA and the State and approval by EPA. For purposes of this SOW, non-routine damage shall be damage to protective barriers, access controls or embankments within the Wallace Yard and Hercules Mill Site for which there is no prescribed repair specified within the M&R Plan. Any such non-routine damage repair shall restore the damaged protective barriers, access controls, and embankments to a condition that is consistent with the RA Work Plan.

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2.7 Five-Year Review

2.6.1Settling Defendants shall review the effectiveness of the response actions as specified in Section VII of the CD no less often than every five (5) years after the certification of the Completion of an Element of Work report for each of the Elements of Work or, if completion of each Element of Work is not separately certified, after the certification of the Completion of the Obligation report. The review will follow the applicable guidance for performing five-year reviews specified in OSWER Directives 9355.7-03A, 9355.7-02A, 9355.7-02FS1, and 9355.7-03B-P. The five-year review shall make a risk-based assessment of the performance of the response actions relative to the protection of human health and the environment. Any further response actions that may be identified as a result of the five-year review shall be in accordance with Section VII of the CD. The first five-year review for this Site will be conducted at the same time as the first five-year review required by the September 2002 Record of Decision for Operable Unit 3 of the Bunker Hill Mining and Metallurgical Complex that is conducted after certification of the completion of all Elements of Work for this Site.

3.0 DESCRIPTION OF PLANS AND REPORTS

This Section sets forth a description of the types of information that should be included in the plans and reports listed below. It is intended to provide a framework for developing such plans and reports. The descriptions provided in this Section should not be construed as a prescriptive limitation or requirement on the content. EPA may require other information in its review of the deliverables and other documents prepared by Settling Defendants under this SOW. Unless otherwise specified, the description is not meant to distinguish between draft and final versions of the documents

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Wallace Yard and Spur Lines Site SOW

3.1 Work Plans

The Work Plans that are to be submitted as deliverables under this SOW represent the overall plan to implement, control, and guide the tasks and activities of the respective Components and Elements of Work addressed by these plans. These Work Plans should include the following information:

- General introduction including:
 - · A description of the work location.
 - General site setting, including topography, drainage, hydrogeology, and geology.
 - Background including overview of the history of the rail line contamination, construction and
 operation as it relates to the development of the response actions covered by the Work Plan.
 - Purpose and scope of that portion of the Work being addressed by the Work Plan.
 - Performance Objectives and Standards applicable to that portion of the Work being addressed by the Work Plan.
 - To the extent applicable, the method of demonstrating compliance with the Performance Standards.
- Overall technical approach, objective, schedule, and process for undertaking, monitoring, and completing the Components and Elements of Work.
- Specific BMP requirements for any construction activities to minimize migration of contaminants during construction.
- Spill prevention and control procedures as applicable.
- Sampling and analysis plan as applicable.
- Summary description of the deliverables, milestone events, and reporting requirements, and cross-references to other documents, as appropriate.
- Site map and other relevant figures, tables, and graphs as applicable.
- Appropriate references to Health and Safety Requirements as applicable.

3.2 Technical Memorandum

In accordance with Section 1.4.5, a Technical Memorandum ("TM") is the mechanism for requesting modifications to: final plans, designs, reports, and schedules developed under this SOW; to the Work being performed under this SOW; or for waivers of ARARS. A TM should include the following information:

- General description of and purpose for the modification.
- · Drawings as applicable.
- · Justification, including any calculations, for the modification or waiver request.
- Tasks and activities to be performed to implement the modification, including any actions associated
 with related subsidiary documents, milestone events, tasks, or activities affected by the modification.
- Effect that the modification may have on schedules, future milestones, deliverables and other documents, tasks, activities, or other Work performed under this SOW.
- Recommendations.
- Analyses, data, and other information used to support the modification or waiver request and any
 proposed recommendations.

3.3 Initiation of Operation Report

The Initiation of Operation Report serves as Settling Defendants' notification of and documentation supporting the commencement of a particular Element of Work, as applicable, under Section 5. The Report should include all relevant analyses, data, and other information used to support Settling Defendants' contention that the particular Element of Work has begun at the time specified by Settling Defendants.

3.4 Completion of an Element of Work Report

The Completion of an Element of Work Report shall be submitted in accordance with the schedule specified in Section 5. The content of the report shall comply with the requirements specified in Section 1.4.16 of this SOW and Section XIV of the CD. This Report should include the following information:

- Overall description of the Report, including purpose and a general description of the portion of the
 Work covered by the Report and the associated Element of Work. The general description shall
 include a description of the Work that was undertaken, objectives, period of operation, and
 Performance Standards.
- Findings and results of the pre-certification inspection, including documentation supporting the
 conclusion that the Performance Standards, as specified within this SOW, have been attained.
- Certification of construction completion (if applicable) including:
 - A completed punch list from the inspection of the completed construction;
 - A certification (as applicable) by a registered Professional Engineer that construction activities have been completed according to the final design.

- A Construction As-Built Report (if applicable) that includes the following information:
 - As-built drawings and specifications, signed and stamped by a registered Professional Engineer.
 - QA/QC records (as applicable).
 - · Summary of any modifications.
- Cross-references to relevant or specific information contained in other documents, as appropriate.
- A statement, in the form specified by Section XIV of the CD, by a registered professional engineer (if applicable) and/or Settling Defendants' Project Coordinator that the portion of the Work has been completed in full satisfaction of the requirements of the CD.

3.5 Completion of the Obligation Report

If individual Completion of an Element of Work Report for all four Elements of Work were not submitted and approved by EPA, then after all Elements of the Work have been fully performed, as set forth in Paragraph 53, Section XIV of the CD, a Completion of the Obligation Report shall be submitted. The Report shall include the certification statements required by Section XIV of the CD.

3.6 Monthly Progress Reports

The Monthly Progress Reports shall be a consolidated status report on the progress of implementing all Elements of Work. The reporting period shall begin as of the first day of the month that construction starts and shall end as of the last day of the month that construction ends. The Reports shall include the following basic information as applicable.

- Introduction, including the purpose and general description of the Work currently being conducted during the month covered by the report.
- Activities/tasks undertaken during the reporting period, and expected to be undertaken during the next reporting period.
- Deliverables and milestones completed during the reporting period, and expected to be completed during the next reporting period.
- Identification of issues and actions that have been or are being taken to resolve the issues.
- Status of the overall Project Schedule and any proposed schedule changes.

3.7Annual Progress Report for Program on the Spur Lines as funded by Settling Defendants

The Annual Progress Report is a consolidated status report on all work conducted on the Spur Lines under the State's Basin Property Remediation Program during the year just ending and to be undertaken

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in the following year by the State. The Report should be separated into sections reflective of the three individual Spur Lines. It should include the following information:

- •Description of the work that was performed during the year covered by the report, and master schedule.
- Activities/tasks undertaken during the year covered by the report, and expected to be undertaken during the next year.
- •Deliverables/milestones completed during the year covered by the report, and expected to be completed during the next year.
- •Identification of issues and actions that have been or are being taken to resolve the issues.
- •TMs submitted.
- Schedules and schedule changes.
- Evaluation of the effectiveness of the work being performed in terms of meeting the Performance Standards. Include data and analytical and statistical methods used to support the evaluation.
- •Recommendations for corrective measures needed, if any, to meet the Performance Standards.

3.83.7 Project Quality Assurance/Quality Control Plan

The Project Quality Assurance/Quality Control (QA/QC) Plan establishes the overall quality assurance and quality control tasks, activities, and procedures associated with the Work to be performed by Settling Defendants. The plan should conform to EPA Guidance, including "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans" December 1980, (QAMS-005/80); "Data Quality Objective Guidance," (EPA/540/G87/003 and 004) and any updates thereto. The plan should include the following information as applicable:

- Introduction, purpose and summary description of the Work.
- Laboratory QA/QC procedures as applicable including:
 - Data quality objectives;
 - Sampling and sample custody procedures;
 - Analytical methods and procedures;
 - Data reduction and validation;
 - Control procedures, including internal quality control checks;
 - Audits;

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- Routine procedures to assess data quality;
- · Corrective action procedures; and
- Data transmission to EPA.
- · Construction related QA/QC including:
 - QC test frequency, methods, and requirements;
 - Performance testing frequency, methods, and requirements;
 - · Acceptance criteria;
 - Criteria for re-testing;
 - · Corrective action;
 - Pre-testing notification requirements to EPA;
 - QA test frequency and methods; and
 - Submittals, review, and transmittal procedures.
- Record keeping and reporting
- Project meetings

3.93.8 Sampling and Analysis Plan

Any required Sampling Plan should establish the overall sampling tasks, activities, and procedures and protocols associated with the Work. The Plan will conform to EPA guidance and include the following information:

- Introduction, including purpose and summary description of the Work.
- · Sampling rationale and objectives.
- · Sample designation plans and procedures.
- Sampling equipment and sampling, preservation, preparation and cleaning procedures.
- Chain-of-custody procedures and conformance with other EPA procedures.
- Record keeping, reporting, and transmittal procedures.

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3.9 Maintenance and Repair Plan

The Maintenance and Repair (M&R) Plan establishes requirements for the long-term maintenance of the protective barriers, erosion controls, and access controls established as part of the Work for the Wallace Yard and Hercules Mill Site. Maintenance and repair activities will be performed in accordance with the procedures specified in the M&R Plan, Attachment E to this SOW.

4.0 DELIVERABLES

This section specifies those deliverables and initiation and completion milestones for various Elements of Work that are subject to stipulated penalties under Section XX of the CD. The required deadlines for these submissions or milestones are specified in Section 5. The CD and this SOW may require the submission of additional documents and additional milestone events, not listed herein.

4.1 General

- Revised Section 5 of SOW showing actual dates for scheduled items that are dependent on entry of the Consent Decree
- Final Project Construction Schedule
- Final Project QA/QC Plan
- Project Health and Safety Plan
- Monthly Progress Reports
- Maintenance and Repair Plan
- Annual Progress Reports for Basin Property Remediation Program Work on the Spur Lines as funded by Settling Defendants
- Final Second Annual Updated Project Construction Schedule

4.2 Wallace Yard Element of Work

- Commence Start of the Wallace Yard Element of Work
- Initiation of Operation Report for the Wallace Yard Element of Work
- Completion of all components of the Wallace Yard Element of Work other than Maintenance and Repair
- · Pre-certification Inspection for the Wallace Yard Element of Work
- Completion of an Element of Work Report for the Wallace Yard Element of Work

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4.3 Hercules Mill Site Element of Work

- Final Removal Characterization Sampling and Analysis Plan for Hercules Mill Ssite
- Commence Start of the Hercules Mill Site Element of Work
- Initiation of Operation Report for the Hercules Mill Site Element of Work
- Completion of all components of the Hercules Mill <u>Site</u> Element of Work other than Maintenance and Repair
- Pre-certification Inspection for the Hercules Mill <u>Site</u> Element of Work
- Completion of an Element of Work Report for the Hercules Mill <u>Site</u> Element of Work

4.4 Ninemile Element of Work

- · Commence Start of the Ninemile Element of Work
- Initiation of Operation Report for the Ninemile Element of Work
- Completion of all components of the Ninemile Element of Work other than Maintenance and Repair
- Pre-certification Inspection for the Ninemile Element of Work
- Completion of an Element of Work Report for the Ninemile Element of Work

4.5 Canyon Creek Element of Work

- Commence Start of the Canyon Creek Element of Work
- Initiation of Operation Report for the Canyon Creek Element of Work
- Completion of all components of the Canyon Creek Element of Work other than Maintenance and Repair
- · Pre-certification Inspection for the Canyon Creek Element of Work
- Completion of an Element of Work Report for the Canyon Creek Element of Work

4.6 Completion of the Obligation Report

5.0 OVERALL PROJECT SCHEDULE

This section provides schedules required of Settling Defendants for the deliverables and initiation and completion of the Elements of Work set forth in Section 4. This section also specifies schedules for other submissions and milestone events as well as goals for EPA's and the State's review.

5.1 Cooperation

The Settling Defendants, EPA and the State agree to discuss issues and concerns as necessary prior to submission of documents and comments.

5.2 Timely Review

EPA and the State shall make good faith efforts to meet the goals for their review set forth below.

5.3 General Deliverables and Scheduled Items

Activity	Scheduled Deadlines
Revised Section 5 of SOW showing actual dates for scheduled items that depend on entry	To be submitted within one 3-weeks after entry of the CD
Submit Draft Proposed Project Construction Schedule	To be submitted as soon as possible and no later than
Submit Revised Draft Proposed Project Construction Schedule	To be submitted within one 13 weeks after entry of CD
EPA and State Review of the Revised Draft Proposed Project Construction Schedule	To be completed within 3 weeks after receipt by EPA and the State
Re-submission (if a notice of disapproval is received)	To be submitted within 2 weeks or such longer time as specified by EPA after receipt by Settling Defendants of a notice of disapproval
Final Project Construction Schedule	To be submitted within 2 weeks of receipt by Settling Defendants of EPA's final approval
Submit Draft Second Annual Update of Project Construction Schedule	To be submitted by February 1, 2010
EPA and State Review of the Draft Second Annual Update of Project Construction Schedule	To be completed within 3 weeks after receipt by EPA and the State
Re-submission (if a notice of disapproval is received)	To be submitted within 2 weeks or such longer time as specified by EPA after receipt by Settling Defendants of a notice of disapproval
Final Second Annual Updated Project Construction Schedule	To be submitted within 2 weeks of receipt by Settling Defendants of EPA's final approval

Activity		Scheduled Deadlines
Proje	ct QA/QC Plan	
•	Draft Project QA/QC Plan	To be submitted within 13 weeks after entry of CD
•	EPA and State Review of the Draft Project QA/QC Plan	To be completed within 3 weeks after receipt by EPA and the State
•	Re-submission (if a notice of disapproval is received)	To be submitted within 2 weeks or such longer time as specified by EPA after receipt of a notice of disapproval
•	Final Project QA/QC Plan	To be submitted within 2 weeks of receipt by Settling Defendants of EPA's final approval
Project Health and Safety Plan		To be submitted within 1 week after entry of CD
Monthly Progress Reports		To be submitted by the 10 th of the month following the reporting period. The reporting period shall be a calendar month beginning with the first full calendar month after entry of the CD
Annual Progress Reports for Basin Property Remediation funded by Settling Defendants		To be submitted by December 31 each year
Incident Reports (e.g. Spills, etc.)		As necessary
Technical Memoranda		As necessary

5.4 Wallace Yard Element of Work

Activity	Scheduled Deadlines
Commence Start of the Wallace Yard Element of Work	Within two weeks after entry of the CD, or aAs otherwise per the approved in the Project Construction Schedule
Initiation of Operation Report for the Wallace Yard Element of Work	To be submitted within 2 weeks after the start of the Wallace Yard Element of Work
Completion of all components of the Wallace Yard Element of Work other than Maintenance and Repair	As per the approved Project Construction Schedule
Pre-certification Inspection for the Wallace Yard Element of Work	To be requested of EPA by Settling Defendants within 45 days after completion of the Wallace Yard Element of Work other than Maintenance and Repair

Activity	Scheduled Deadlines
Completion an Element of Work Report for the Wallace Yard Element of Work	To be submitted within 30 days after the pre- certification inspection provided that, based on the results of the inspection, Settling Defendants continue to believe that this Element of Work other than Maintenance and Repair has been fully performed and the Performance Standards attained

5.5 Hercules Mill <u>Site</u> Element of Work

Activity	Scheduled Deadlines
Draft Removal Characterization Sampling and Analysis Plan for the Hercules Mill Site as required by Section 2.3.3.3.a	To be submitted within one week of entry of the CDas soon as possible and no later than
Revised Draft Removal Characterization Sampling and Analysis Plan for the Hercules Mill site as required by Section 2.3.3.3.a.	To be submitted within 15 days after entry of the CD
EPA and State Review of the Revised Draft Removal Characterization Sampling and Analysis Plan	To be completed within 3 weeks after receipt by EPA and the State
Re-submission (if a notice of disapproval is received)	To be submitted within 2 weeks or such longer time as specified by EPA after receipt by Settling Defendants of a notice of disapproval
Final Removal Characterization Sampling and Analysis Plan	To be submitted within 2 weeks of receipt by Settling Defendants of EPA's final approval
Commence Start of the Hercules Mill <u>Site</u> Element of Work	Within two weeks of entry of the CD, or aAs otherwiseper the approved by the Project Construction Schedule
Initiation of Operation Report for the Hercules Mill <u>Site</u> Element of Work	To be submitted within 2 weeks after the start of the Hercules Mill Site Element of Work
Completion of all components of the Hercules Mill Site Element of Work other than Maintenance and Repair	As per the approved Project Construction Schedule
Pre-certification Inspection for the Hercules Mill <u>Site</u> Element of Work	To be requested of EPA by Settling Defendants within 45 days after completion of the Hercules Mill Site Element of Work other than Maintenance and Repair

Activity	Scheduled Deadlines
Completion of an Element of Work Report for the Hercules Mill Site Element of Work	To be submitted within 30 days after the pre- certification inspection provided that, based on the results of the inspection, Settling Defendants continue to believe that this Element of Work other than Maintenance and Repair has been fully performed and the Performance Standards attained

5.6 Ninemile Element of Work

Activity	Scheduled Deadlines
Commence Start of the Ninemile Element of Work	As per the approved Project Construction Schedule
Initiation of Operation Report for the Ninemile Element of Work	To be submitted within 2 weeks after the start of the Ninemile Element of Work
Completion of all components of the Ninemile Element of Work other than Maintenance and Repair	As per the approved Project Construction Schedule
Pre-certification Inspection for the Ninemile Element of Work	To be requested of EPA by Settling Defendants within 45 days after completion of the Ninemile Element of Work other than Maintenance and Repair
Completion of an Element of Work Report for the Ninemile Element of Work	To be submitted within 30 days after the pre- certification inspection provided that, based on the results of the inspection, Settling Defendants continue to believe that this Element of Work other than Maintenance and Repair has been fully performed and the Performance Standards attained

5.7 Canyon Creek Element of Work

Activity	Scheduled Deadlines
Commence Start of the Canyon Creek Element of Work	As per the approved Project Construction Schedule
Initiation of Operation Report for the Canyon Creek Element of Work	To be submitted within 2 weeks after the start of the Canyon Creek Element of Work
Completion of all components of the Canyon Creek Element of Work other than Maintenance and Repair	As per the approved Project Construction Schedule

Activity	Scheduled Deadlines
Pre-certification Inspection for the Canyon Creek Element of Work	To be requested of EPA by Settling Defendants within 45 days after completion of the Canyon Creek Element of Work other than Maintenance and Repair
Completion of an Element of Work Report for the Canyon Creek Element of Work	To be submitted within 30 days after the pre- certification inspection provided that, based on the results of the inspection, Settling Defendants continue to believe that this Element of Work other than Maintenance and Repair has been fully performed and the Performance Standards attained

5.8 Maintenance and Repair Plan

Activity	Scheduled Deadlines
Draft M&R Plan	To be submitted no later than 90 days of entry of CD
EPA and State review of M&R Plan	To be completed within four weeks after receipt by EPA and the State
Re-submission (if a notice of disapproval is received)	To be submitted within three weeks or such longer time as specified by EPA after receipt by Settling Defendants of a notice of disapproval
Final M&R Plan	To be submitted within two weeks of receipt by Settling Defendants of EPA's final approval

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5.8 5.9 Completion of the Obligation Report

Activity	Schedule
Pre-certification Inspection for all Elements of the Work for which Completion of an Element of Work Report were not previously submitted and approved	To be requested of EPA by Settling Defendants within 45 after Settling Defendants conclude that all Elements of the Work for which Completion of an Element of Work Reports were not previously submitted and approved have been fully performed
Completion of the Obligation Report	To be submitted within 30 days after the pre- certification inspection provided that, based on the results of the inspection, Settling Defendants continue to believe that all Elements of Work for which Completion of an Element of Work Report were not previously submitted and approved have been fully performed

ATTACHMENTS

Attachment A: Site Map

Attachment B: Response Action Work Plan

Attachment C: Response Action Design Drawings

Attachment D: Project Material and Placement Specifications

Attachment E: Maintenance and Repair Plan